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10/727,193	12/03/2003	Bernard E. Brady JR.	EMC-101(US)	4674
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MACILWINE, JOHN MOORE JAIN				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/727,193

**Applicant(s)**

BRADY ET AL.

**Examiner**

JOHN M. MACILWINEN

**Art Unit**

2442

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 129-182 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 129-182 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. As an initial matter, Applicant filed a summary of the interview of 11/16/2010, said summary received on 11/19/2010. On page 4 of Applicant's summary, Applicant addresses Federal Register Guidelines from September 1, 2010, said guidelines being directed to KSR v Teleflex. Applicant states that during the interview:

*"The Examiner declined the proposed discussion [of said Federal Register Guidelines], because he was not properly instructed and trained by the USPTO in regard to these new KSR guidelines."*

Applicant's statement is incorrect - the above exchange neither occurred during the interview nor any other point. There has not been specific discussion addressing the September 1 Federal Register Guidelines, and the Examiner neither stated, agreed, or implied that he was "not properly instructed and trained" with regards to said guidelines or any other matter.

During the 11/16/2010 interview, the Examiner did, however, tell Applicant that Applicant's personal interpretation of case law was unlikely to be persuasive if it conflicted with the procedures and guidance provided to the Examiner by the USPTO.

2. Applicant's arguments filed 04/20/2010 have been fully considered.

3. After further consideration of the claimed subject matter and the amended claim language, a new grounds of rejection, solely relying on the teachings of Wiley (US 7,017,185 B1) has been made; said rejection is discussed further below.

4. On page 15 of Applicant's 04/20/2010 response, Applicant begins by summarizing the rejections made in the 01/22/2010 Final Rejection and continues by reciting sections from the MPEP. Continuing on page 16, Applicant argues newly added claim limitations; Applicant argues that they believe Khanolkar (US 7,127,743 B1) fails to teach all of the limitations recited on page 16, paragraph 3. However, the Examiner is not relying on Khanolkar for the argued claim language.

5. Continuing on page 16, Applicant addresses Wiley. Applicant argues that Wiley only stores "routing information or packet data" and that Wiley does not show "any of the originally received transmission event data comprising substantive content of the message is saved".

Applicant, however, is arguing features neither recited nor required by their claim language (e.g., "originally received" data). Additionally, Applicant's claim language does not require "substantive content **of** a message", but rather more broadly recites "substantive content **or** a message" (emphasis added).

Further still, the precise meets and bounds of the limitation "substantive content" are indefinite. It is unclear precisely when content would transition from substantive to then failing to be substantive. This issue is discussed in the pending rejections below.

Applicant's arguments thus are not persuasive.

6. Continuing through page 18, Applicant argues that their Specification should be interpreted broadly. Applicant then argues in the second paragraph of page 18 that their "broad" Specification supports the indefinite limitation "substantive". Applicants have

argued that their Specification contains "very broad statement[s]"; these "very broad statement[s]" fail to clarify the precise meets and bounds of the term "substantive".

7. Applicant next argue on pages 18 - 19 that a rejection made in view of both Wiley and Khanolkar would "teach away" from the claimed invention and that "convincing arguments" have not been provided for combining teachings from Wiley and Khanolkar. Applicant's allegations are not persuasive; however, in order to further clarify rejections made under 35 USC 103(a), additional explanations have provided with the motivation statements.

8. On page 20, Applicant continues to argue against utilizing the teachings of Wiley with those of Khanolkar. Applicant argues that a motivation statement that relies on an improvement in speed (i.e., "faster") should not be considered valid. Applicant's arguments have been considered but are not persuasive.

9. Continuing through page 22, Applicant argues that their "problem to be solved" is different than what Applicant's interpretation of Wiley and Khanolkar. Applicant's arguments are not persuasive in view of the provided motivation statements utilized in the pending rejections made under 35 USC 103(a) when relying on Wiley in view of Khanolkar (e.g., see claim 138, 142, etc).

### ***Double Patenting***

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent

and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**11.** Claims 129, 130, 131, 132, 135, 136, 139, 140, 141, 144, 146, 147, 148, 149, 150, 153, 154, 157, 158, 159, 164, 166, 167, 168, 171, 172, 175, 176, 177, 179, 181 and 182 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 41, 43, 44, 45, 46, 47, 48, 49, 50,

51, 52, 53, 55, 56, 57, 59, 60, 61, 62, 63, 66, 67, 68, 69, 70, 71, 72 and 73 of copending Application No. 11/442,569. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons:

Claims 41, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 55, 56, 57, 59, 60, 61, 62, 63, 66, 67, 68, 69, 70, 71, 72 and 73 of copending Application No. 11/442,569, contain every element of claims 129, 130, 131, 132, 135, 136, 139, 140, 141, 144, 146, 147, 148, 149, 150, 153, 154, 157, 158, 159, 164, 166, 167, 168, 171, 172, 175, 176, 177, 179, 181 and 182 of the instant application and thus anticipate the claims of the instant application. Claims of the instant application therefore are not patentably distinct from the copending claims of Application No. 11/442,569 and as such are unpatentable over obviousness-type double patenting.

"Claim 12 and Claim 13 are generic to the species of invention covered by claim 3 of the patent. Thus, the generic invention is **"anticipated"** by the species of the patented invention. Cf., *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (holding that an earlier species disclosure in the prior art defeats any generic claim) 4. This court's predecessor has held that, without a terminal disclaimer, the species claims preclude issuance of the generic application. In *re Van Ornum*, 686 F.2d 937, 944, 214 USPQ 761, 767 (CCPA 1982); *Schneller*, 397 F.2d at 354. Accordingly, absent a terminal disclaimer, claims 12 and 13 were properly rejected under the doctrine of

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obviousness-type double patenting." (In re Goodman (CA FC) 29 USPQ2d 2010  
(12/3/1993).



12. Claim 129 of the pending Application corresponds to claim 41 of Application No. 11/442,569, as is illustrated below:

Claim 129 of the pending Application	Claim 41 of Application No. 11/442,569
<p><b>129. A method comprising:</b></p> <p><b>collecting a plurality of</b></p> <p><b>transmission events provided by one or</b></p> <p><b>more nodes of a network into one or</b></p> <p><b>more data structures; and</b></p> <p><b>creating one or more</b></p> <p><b>characterization records for at least one</b></p> <p><b>or more data structures of said one or</b></p> <p><b>more data structures,</b></p> <p><b>one or more transmission events</b></p> <p><b>of said plurality of the transmission</b></p> <p><b>events being collected to said at least</b></p> <p><b>one data structure of said one or more</b></p> <p><b>data structures,</b></p> <p><b>wherein at least one of said one</b></p> <p><b>or more characterization records</b></p> <p><b>comprises one or more indicators of</b></p> <p><b>location or locations of one or more</b></p>	<p><b>41. A method, comprising:</b></p> <p><b>collecting a plurality of</b></p> <p><b>transmission events provided by one or</b></p> <p><b>more nodes of said network into one or</b></p> <p><b>more data structures; and</b></p> <p><b>creating two or more</b></p> <p><b>characterization records of different</b></p> <p><b>types for at least one data structure of</b></p> <p><b>said one or more data structures,</b></p> <p><b>one or more transmission events</b></p> <p><b>of said plurality of the transmission</b></p> <p><b>events of being collected to said at</b></p> <p><b>least one data structure of said one or</b></p> <p><b>more data structures,</b></p> <p><b>wherein at least one</b></p> <p><b>characterization record of said different</b></p> <p><b>types comprises one or more indicators</b></p> <p><b>of a location or locations of one or</b></p>

<p><b>data elements stored in</b></p> <p><b>said one or more</b></p> <p><b>data structures</b></p> <p>and comprising a <b>substantive content</b> or a message</p> <p><b>comprised in at least one of said one or more transmission events, to allow accessing</b> said at least one or more characterization records</p> <p><b>to determine said one or more indicators of the location or locations of said one or more data elements.</b></p>	<p><b>more data elements comprised in at least one of said one or more transmission events,</b></p> <p>and wherein at least one another <b>characterization record of a second type</b> of said different types further</p> <p><b>comprises</b> one or more data <b>features of</b> one or selected <b>transmission events</b> of said one or more transmission events,</p> <p><b>to allow determining said one or more indicators of the location or locations of said one or more data elements</b></p> <p><b>and to allow determining</b> whether said one or more features are present in any of said one or selected transmission events of said one or more transmission events.</p>
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- 13.** Claim 130 of the pending Application corresponds to claim 43 of Application No. 11/442,569.
- 14.** Claim 131 of the pending Application corresponds to claim 44 of Application No. 11/442,569.
- 15.** Claim 132 of the pending Application corresponds to claim 45 of Application No. 11/442,569.
- 16.** Claim 135 of the pending Application corresponds to claim 46 of Application No. 11/442,569.
- 17.** Claim 136 of the pending Application corresponds to claim 47 of Application No. 11/442,569.
- 18.** Claim 139 of the pending Application corresponds to claim 48 of Application No. 11/442,569.
- 19.** Claim 140 of the pending Application corresponds to claim 49 of Application No. 11/442,569.
- 20.** Claim 141 of the pending Application corresponds to claim 50 of Application No. 11/442,569.
- 21.** Claim 144 of the pending Application corresponds to claim 51 of Application No. 11/442,569.
- 22.** Claims 146 and 147 of the pending Application corresponds to claim 52 of Application No. 11/442,569.
- 23.** Claim 148 of the pending Application corresponds to claim 53 of Application No. 11/442,569.

- 24.** Claim 149 of the pending Application corresponds to claim 55 of Application No. 11/442,569.
- 25.** Claim 150 of the pending Application corresponds to claim 56 of Application No. 11/442,569.
- 26.** Claim 153 of the pending Application corresponds to claim 56 of Application No. 11/442,569.
- 27.** Claim 154 of the pending Application corresponds to claim 57 of Application No. 11/442,569.
- 28.** Claim 157 of the pending Application corresponds to claim 57 of Application No. 11/442,569.
- 29.** Claim 158 of the pending Application corresponds to claim 60 of Application No. 11/442,569.
- 30.** Claim 159 of the pending Application corresponds to claim 61 of Application No. 11/442,569.
- 31.** Claim 164 of the pending Application corresponds to claim 59 of Application No. 11/442,569.
- 32.** Claim 166 of the pending Application corresponds to claim 62 of Application No. 11/442,569.
- 33.** Claim 167 of the pending Application corresponds to claim 63 of Application No. 11/442,569.
- 34.** Claim 168 of the pending Application corresponds to claim 66 of Application No. 11/442,569.

- 35.** Claim 171 of the pending Application corresponds to claim 67 of Application No. 11/442,569.
- 36.** Claim 175 of the pending Application corresponds to claim 70 of Application No. 11/442,569.
- 37.** Claim 177 of the pending Application corresponds to claim 71 of Application No. 11/442,569.
- 38.** Claim 179 of the pending Application corresponds to claim 72 of Application No. 11/442,569.
- 39.** Claims 181 and 182 of the pending Application corresponds to claim 73 of Application No. 11/442,569.
- 40.** This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 112***

- 41.** The following is a quotation of the second paragraph of 35 U.S.C. 112:
- The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 42.** Claims 129 – 182 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 43.** Regarding claim 129, said claim recites, beginning on line 5:
- "creating one or more characterization records ... transmission events being collected ... one or more characterization records comprises one or more*

*indicators of location ... of one or more data elements, to allow accessing said at least one of the one or more characterization records...to determine said one or more indicators of location"*

It is unclear what the relationship is between the "to allow accessing" language of line 14 and the other limitations recited in the claim; i.e., it is unclear which of the claimed features are relied upon to provide/perform the "to allow accessing" feature. If the "indicator of location" is the feature relied upon "to allow accessing", it is then unclear why the "indicator of location" is created merely for the purpose of accessing the indication of location itself.

Applicant is encouraged to more clearly claim the structure of the information stored in claimed 129.

Claim 129 further recites, on line 13, information which is  
*"comprising a substantive content or a message".*

The precise meets and bounds of the limitation "substantive content" are indefinite. It is unclear precisely when content would transition from being considered "substantive", as well as precisely when content would cross back into failing to be "substantive"; that is, the demarcation between "substantive" and "un-substantive" is indistinct and indefinite.

**44.** Regarding claim 133, said claim recites on lines 3 – 5:

*"a period during which a transmission event of said one or more events **is** occurred, and an internet protocol address of a node or said one or more nodes **[that]** transmitted said transmission event"* (emphasis added).

45. Regarding claim 135, said claim recites on lines 6 – 7 of page 3:

*“an internet protocol address of a node of said one or more nodes **[that]** transmitted said transmission event”.*

Claim 135 next recites, on lines 1 – 2 of page 4:

*“a node of said one or more nodes **being** a destination of said transmission event”.*

46. Regarding claim 136, said claim recites on lines 4 - 5:

*“data elements comprising at least one of said one or more transmission events **[in an]** unabridged **[form].**”*

47. Regarding claim 140, said claim utilizes the adjective “corresponding” as a verb, reciting on lines 3 – 4:

*“storing ... comprising **corresponding** said one or more characterization records...”* (emphasis added).

48. Regarding claims 148 and 166, said claims contains issues corresponding to those addressed above with regards to claim 129. Thus claims 148 and 166 are rejected for the reasons given when addressing claim 129.

49. Regarding claims 151 and 169, said claims contains issues corresponding to those addressed above with regards to claim 133. Thus claims 151 and 169 are rejected for the reasons given when addressing claim 133.

50. Regarding claims 158 and 171, said claims contains issues corresponding to those addressed above with regards to claim 135. Thus claims 158 and 171 are rejected for the reasons given when addressing claim 135.

**51.** Regarding claims 159 and 172, said claims contains issues corresponding to those addressed above with regards to claim 136. Thus claims 159 and 172 are rejected for the reasons given when addressing claim 136.

**52.** Regarding claim 176, said claim contains issues corresponding to those addressed above with regards to claim 140. Thus claim 176 is rejected for the reasons given when addressing claim 140.

**53.** Regarding claim 179, said claim is directed to the "computer software product of claim 164"; however, claim 164 is directed to "the apparatus of claim 148" and not to a "computer software product". Thus there is a lack of antecedent basis for the limitation the "computer software product of claim 164".

**54.** The pending dependent claims, including claims 130, 131, 132, 134, 137, 138, 139, 142 - 147, 149, 150, 152 - 157, 160 - 165, 167, 168, 170, 173 - 175 and 177, 178 and 180 - 182 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite; said claims depend on indefinite claims (e.g., claims 129, 148 and 166), and in addition to the above noted ambiguities, fail to rectify or otherwise clarify the indefinite language of their parent claims.

**55.** In order to perform a complete examination, the above claims have been interpreted broadly.

#### ***Claim Rejections - 35 USC § 101***

**56.** 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.



**57.** Claims 148, 149, 151, 152 and 155 – 182 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

**58.** Regarding claim 148, said claim is directed to

*"An apparatus comprising a first controller ... and a second controller".*

The broadest reasonable interpretation of the claimed apparatus includes non-statutory, software only embodiments, particularly in view of Applicant's Specification, page 8 lines 14 – 19 which recites a server appliance comprised of software as an exemplary embodiment for implementing the invention.

Though said claim recites "elements stored in ... data structures ... comprising content", this language is interpreted as part of the operating environment of the claimed apparatus rather than part of the apparatus itself.

Applicant is encouraged to positively recite claim language that clearly corresponds to a hardware element, such as a hardware processor in the body of the pending claim.

**59.** Claims 149, 151, 152 and 155 – 182 recite further limitations directed to the above apparatus while failing to positively recite any statutory limitations. Said claims are thus rejected for the reasons given above when addressing claim 148.

**60.** Claims 166 – 182 are directed to a "computer software product, comprising a computer-usable medium". The broadest reasonable interpretation of a claim drawn to such a computer-usable medium includes transitory propagating signals per se in view of the ordinary and customary meaning of said computer-usable media. Claims 166 - 182 may be amended to narrow the claim to cover only statutory embodiments by,

instead of claiming a "computer software product", directing the claim language to "A non-transitory computer-usable medium".

***Claim Rejections - 35 USC § 102***

**61.** The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

**62.** Claims 129 – 135, 137, 139 – 140, 143, 145, 148 – 154, 156 – 158, 160, 162, 165 – 171, 173, 175 and 180 are rejected under 35 U.S.C. 102(a) as being anticipated by Wiley (US 7,017,185 B1).

**63.** Regarding claim 129, Wiley shows a method comprising:

collecting a plurality of transmission events (*col. 4 line 19*) provided by one or more nodes of a network (*Fig. 1 items 24, 26, 28*) into one or more data structures (*col. 4 lines 26 – 28, col. 5 lines 48 – 55, Fig. 2*); and

creating one or more characterization records for at least one or more data structures of said one or more data structures (*col. 5 lines 62 - 67*), one or more transmission events of said plurality of the transmission events being collected to said at least one data structure of said one or more data structures (*col. 4 lines 26 - 28*), wherein at least one of said one or more characterization records comprises one or more indicators of location or locations (*col. 6 lines 11 - 15*) of one or more data elements stored in said one or more data structures and comprising a substantive

content or message comprised in at least one of said one or more transmission events (*col. 5 lines 62 – 67, col. 6 lines 58 - 60*), to allow accessing said at least one of the one or more characterization records to determine said one or more indicators of the location or locations of said one or more data elements (*col. 4 lines 46 – 67, col. 5 lines 52 – 54, col. 6 lines 2 – 3, col. 6 lines 36 – 38, col. 7 lines 45 – 51 and Figs.3A and 3B*).

**64.** Regarding claim 130, Wiley further shows wherein said collecting and said creating is performed by a site of a plurality of sites comprised in said network (*col. 4 lines 4 - 6, col. 4 lines 18 - 20, col. 4 lines 26 - 28, col. 4 lines 51 - 52*).

**65.** Regarding claim 131, Wiley further shows wherein said one or more data elements are stored within said at least one data structure (*col. 4 lines 51 – 52 and Fig. 2*).

**66.** Regarding claim 132, Wiley further shows wherein said collecting comprises creating observation records (*col. 6 lines 36 - 38*) of said plurality of the transmission events and storing said observation records in said one or more data structures (*col. 5 lines 49 - 56*), such that said at least one data structure of said one or more data structures comprises one or more observation records of said observation records created using one or more transmission events of said plurality of transmission events (*col. 6 lines 1 - 10*), said one or more observation records being generated using one or more characteristics of said one or more transmission events in order to allow entering said one or more observation records to determine whether at least one of said one or more characteristics is present in said at least one data structure (*col. 6 lines 36 - 40, col. 7 lines 45 - 51, col. 8 lines 51 - 62*).

**67.** Regarding claim 133, Wiley further shows wherein said one or more characteristics of said one or more transmission events are one or more of: a period during which a transmission event of said one or more transmission events is occurred, and an internet protocol address of a node of said one or more nodes transmitted said transmission event (*col. 4 lines 25 - 26*).

**68.** Regarding claim 134, Wiley further shows wherein said at least one of said one or more characterization records is an index creating using said one or more observation records (*col. 5 lines 9 - 18, col. 5 lines 49 - 56, col. 7 lines 45 - 50*).

**69.** Regarding claim 135, Wiley further shows wherein said at least one of said one or more characterization records is an index comprising one or more of: a type of or an importance level for a transmission event of said one or more transmission events, an internet protocol address of a node of said one or more nodes transmitted said transmission event, and an internet protocol address of a node of said one or more nodes being a destination of said transmission event (*col. 4 lines 24 - 28*).

**70.** Regarding claim 137, Wiley further shows wherein said one or more characterization records comprise a summary of said one or more transmission events of said plurality of transmission events (*col. 4 lines 18 - 30, col. 4 lines 53 - 54*).

**71.** Regarding claim 139, Wiley further shows wherein said one or more data elements comprise partial or complete data comprised in said at least one or more of the one or more transmission events (*col. 4 lines 18 - 30*).

**72.** Regarding claim 140, Wiley further shows storing said one or more data structures comprising corresponding said one or more characterization records in a

memory, in a non-volatile memory or in a data storage (*col. 3 lines 51 – 53, col. 4 lines 4 – 15, col. 4 lines 26 – 30*).

**73.** Regarding claim 143, Wiley further shows where said network is configured to provide network activity data in a computer system comprising a plurality of nodes interconnected for communicating via said network (*Figs. 1 and 2, col. 4 lines 4 - 20*).

**74.** Regarding claim 145, Wiley further shows wherein said location or said locations of the one or more data elements are in said at least one data structure of said one or more data structures (*Fig. 2*).

**75.** Regarding claim 148, Wiley shows an apparatus comprising:

a first controller, configured to perform collecting a plurality of transmission events (*col. 4 line 19*) provided by one or more nodes of a network (*Fig. 1 items 24, 26, 28*) into one or more data structures (*col. 4 lines 26 – 28, col. 5 lines 48 – 55, Fig. 2*);  
and

a second controller, configured to create one or more characterization records for at least one or more data structures of said one or more data structures (*col. 5 lines 62 - 67*), one or more transmission events of said plurality of the transmission events being collected to said at least one data structure of said one or more data structures (*col. 4 lines 26 - 28*), wherein at least one of said one or more characterization records comprises one or more indicators of location or locations (*col. 6 lines 11 - 15*) of one or more data elements stored in said one or more data structures and comprising a substantive content or message comprised in at least one of said one or more transmission events (*col. 5 lines 62 – 67, col. 6 lines 58 - 60*), to allow accessing said at

least one of the one or more characterization records to determine said one or more indicators of the location or locations of said one or more data elements (*col. 4 lines 46 – 67, col. 5 lines 52 – 54, col. 6 lines 2 – 3, col. 6 lines 36 – 38, col. 7 lines 45 – 51 and Figs.3A and 3B*).

**76.** The limitations of claim 149 are rejected in the analysis of claim 132; claim 149 is rejected on that basis.

**77.** Regarding claim 150, Wiley shows a memory, configured to store said one or more data structures and to store, for said at least one of said one or more data structures, said one or more observation records and said one or more characterization records (*col. 3 lines 42 - 53*).

**78.** The limitations of claim 151 are rejected in the analysis of claim 133; claim 151 is rejected on that basis.

**79.** The limitations of claim 152 are rejected in the analysis of claim 134; claim 152 is rejected on that basis.

**80.** Regarding claim 153, Wiley shows a memory, configured to store said one or more data structures comprising corresponding said one or more characterization records (*col. 3 lines 42 - 53*).

**81.** The limitations of claim 154 are rejected in the analysis of claim 140; claim 154 is rejected on that basis.

**82.** The limitations of claim 156 are rejected in the analysis of claim 145; claim 156 is rejected on that basis.

**83.** The limitations of claim 157 are rejected in the analysis of claim 131; claim 157 is rejected on that basis.

**84.** The limitations of claim 158 are rejected in the analysis of claim 135; claim 158 is rejected on that basis.

**85.** The limitations of claim 160 are rejected in the analysis of claim 137; claim 160 is rejected on that basis.

**86.** The limitations of claim 162 are rejected in the analysis of claim 139; claim 162 is rejected on that basis.

**87.** The limitations of claim 165 are rejected in the analysis of claim 145; claim 165 is rejected on that basis.

**88.** Regarding claim 166, Wiley shows a computer software product, comprising a computer-usable medium having computer readable instructions stored thereon for execution by a processor to perform a method comprising:

collecting a plurality of transmission events (*col. 4 line 19*) provided by one or more nodes of a network (*Fig. 1 items 24, 26, 28*) into one or more data structures (*col. 4 lines 26 – 28, col. 5 lines 48 – 55, Fig. 2*); and

creating one or more characterization records for at least one or more data structures of said one or more data structures (*col. 5 lines 62 - 67*), one or more transmission events of said plurality of the transmission events being collected to said at least one data structure of said one or more data structures (*col. 4 lines 26 - 28*), wherein at least one of said one or more characterization records comprises one or more indicators of location or locations (*col. 6 lines 11 - 15*) of one or more data

elements stored in said one or more data structures and comprising a substantive content or message comprised in at least one of said one or more transmission events (*col. 5 lines 62 – 67, col. 6 lines 58 - 60*), to allow accessing said at least one of the one or more characterization records to determine said one or more indicators of the location or locations of said one or more data elements (*col. 4 lines 46 – 67, col. 5 lines 52 – 54, col. 6 lines 2 – 3, col. 6 lines 36 – 38, col. 7 lines 45 – 51 and Figs.3A and 3B*).

**89.** The limitations of claim 167 are rejected in the analysis of claim 131; claim 167 is rejected on that basis.

**90.** The limitations of claim 168 are rejected in the analysis of claim 132; claim 168 is rejected on that basis.

**91.** The limitations of claim 169 are rejected in the analysis of claim 133; claim 169 is rejected on that basis.

**92.** The limitations of claim 170 are rejected in the analysis of claim 134; claim 170 is rejected on that basis.

**93.** The limitations of claim 171 are rejected in the analysis of claim 135; claim 171 is rejected on that basis.

**94.** The limitations of claim 173 are rejected in the analysis of claim 137; claim 173 is rejected on that basis.

**95.** The limitations of claim 175 are rejected in the analysis of claim 139; claim 175 is rejected on that basis.

**96.** The limitations of claim 176 are rejected in the analysis of claim 140; claim 176 is rejected on that basis.



**97.** The limitations of claim 180 are rejected in the analysis of claim 145; claim 180 is rejected on that basis.

***Claim Rejections - 35 USC § 103***

**98.** The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**99.** Claims 136, 159 and 172 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiley in view of Hellerstein (US 6,836,894 B1).

**100.** Regarding claim 136, Wiley shows wherein said at least one of said one or more characterization records is an index indicating said location or locations of one or more data elements comprising at least one of said one or more transmission events (*col. 4 lines 40 - 50, col. 6 lines 11 - 16*).

Wiley does not show all of: transmission events unabridged.

Hellerstein shows transmission events unabridged (*col. 4 lines 30 – 33, col. 6 lines 53 – 64 and col. 7 lines 17 – 37*).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify disclosure of Wiley, said disclosure directed to a network monitoring and storage system (*Wiley, col. 4 lines 17 – 30*) with the teachings of Hellerstein (*where Hellerstein is also directed a network monitoring and storage system (Hellerstein, col. 1 lines 15 – 35, col. 3 lines 7 – 12)*), and thus utilize Hellerstein's known technique

supporting viewing both summarized as well as detailed, unabridged data (*Hellerstein, col. 7 lines 3 - 33*) in order improve Wiley's similar network monitoring and storage device in the same way; that is to provide the improved analysis capabilities enabled and advocated by Hellerstein (*Hellerstein, col. 4 lines 11 - 37*) in the device of Wiley.

**101.** The limitations of claim 159 are rejected in the analysis of claim 136; claim 159 is rejected on that basis.

**102.** The limitations of claim 172 are rejected in the analysis of claim 136; claim 172 is rejected on that basis.

**103.** Claims 138, 142, 144, 161, 163, 164, 174, 178 and 179 rejected under 35 U.S.C. 103(a) as being unpatentable over Wiley in view of Khanolkar (7,127,743 B1).

**104.** Regarding claim 138, Wiley shows claim 129.

Wiley does not show all of: wherein at least one of said plurality of the transmission events is a notification.

Khanolkar shows wherein at least one of said plurality of the transmission events is a notification (*Fig. 2, col. 5 lines 10 - 40, col. 5 lines 65 - 66*).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify disclosure of Wiley with the notification monitoring explicitly noted by Khanolkar, where Wiley and Khanolkar teach similar devices operating in the same IP based communications environment (*Khanolkar, teaching a networking monitoring and storage device in col. 4 lines 21 - 30 and col. 7 lines 21 - 25 and Wiley, also teaching a network monitoring and storage device in col. 2 lines 17 - 20, col. 3 lines 54 - 62 and*

*col. 4 lines 25 – 30*) in order to better cover all the types of network activity that occurs on IP networks.

**105.** The limitations of claim 161 are rejected in the analysis of claim 138; claim 161 is rejected on that basis.

**106.** The limitations of claim 174 are rejected in the analysis of claim 138; claim 174 is rejected on that basis.

**107.** Regarding claim 142, Wiley shows claim 129.

Wiley does not show all of: one of said one or more characterization records comprise an aggregate summary of said at least one data structure and one or more of other data structures of said one or more data structures.

Khanolkar shows wherein one of said one or more characterization records comprise an aggregate summary of said at least one data structure and one or more of other data structures of said one or more data structures (*Khanolkar, col. 2 lines 20 – 25, col. 8 lines 30 – 35, col. 9 lines 5 – 15*).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify disclosure of Wiley with the monitoring and summarizing options taught by Khanolkar, where Wiley and Khanolkar teach similar devices operating in the same IP based communications environment (*Khanolkar, teaching a networking monitoring and storage device in col. 4 lines 21 - 30 and col. 7 lines 21 – 25 and Wiley, also teaching a network monitoring and storage device in col. 2 lines 17 – 20, col. 3 lines 54 – 62 and col. 4 lines 25 – 30*) in order to provide additional display capabilities,

allowing users to better focus on a filter content (*Khanolkar, col. 9 lines 5 - 15*), as well as to reduce data storage volume (*Khanolkar, col. 8 lines 30 - 35*).

**108.** The limitations of claim 163 are rejected in the analysis of claim 142; claim 163 is rejected on that basis.

**109.** The limitations of claim 178 are rejected in the analysis of claim 142; claim 178 is rejected on that basis.

**110.** Regarding claim 144, Wiley shows claim 129.

Wiley does not show all: wherein all or selected transmission events of said plurality of the transmission events are notifications provided by all or selected nodes of said one or more nodes of said network.

Khanolkar shows wherein all or selected transmission events of said plurality of the transmission events are notifications provided by all or selected nodes of said one or more nodes of said network (*col. 5 lines 10 – 66*).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify disclosure of Wiley with the notification monitoring explicitly noted by Khanolkar, where Wiley and Khanolkar teach similar devices operating in the same IP based communications environment (*Khanolkar, teaching a networking monitoring and storage device in col. 4 lines 21 - 30 and col. 7 lines 21 – 25 and Wiley, also teaching a network monitoring and storage device in col. 2 lines 17 – 20, col. 3 lines 54 – 62 and col. 4 lines 25 – 30*) in order to better cover all the types of network activity that occurs on IP networks.

**111.** The limitations of claim 164 are rejected in the analysis of claim 144; claim 164 is rejected on that basis.

**112.** The limitations of claim 179 are rejected in the analysis of claim 144; claim 179 is rejected on that basis.

**113.** Claims 141, 147, 155, 177 and 182 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiley in view of Coates (US 7,590,747 B2).

**114.** Regarding claim 141, Wiley shows storing said one or more data structures with corresponding characterization records (*Fig. 2 and col. 3 lines 42 - 53*).

Wiley does not show all of: storage as a file system or as a hierarchical file system.

Coates shows storage as a file system or as a hierarchical file system (*col. 5 lines 30 – 38, col. 3 lines 50 - 67*).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify disclosure Wiley said disclosure directed to a network monitoring and storage system (*Wiley, col. 4 lines 17 – 30*) with improved network storage architecture of Coates (*Coates, col. 3 lines 7 – 10, col. 5 lines 32 – 38*) to yield the predictable result of improved cost-effectiveness and expandability (*Coates, col. 5 lines 32 – 38*).

Furthermore, it would have been obvious to obvious to one of ordinary skill in the art at the time of the invention to modify disclosure of Wiley with that of Coates in order to apply Coates known network storage technique to improve the similar network

storage device of Wiley in the same way; that is to similarly improve the cost-effectiveness and expandability of Wiley (*Coates, col. 5 lines 32 – 38*).

**115.** Regarding claim 147, Wiley shows claim 129.

Wiley does not show all of: creating a digital signature of said at least one data structures.

Coates shows creating a digital signature of said at least one data structures (*Figs. 5, 6, col. 10 line 48 – col. 11 line 40, col. 12 lines 50 - 62*).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify disclosure Wiley said disclosure directed to a network monitoring and storage system (*Wiley, col. 4 lines 17 – 30*) with Coates' similar network storage architecture and authentication support (*Coates, col. 3 lines 7 – 10, col. 5 lines 32 – 38*) in order to provide the predictable result of improved security and better regulated file access through the use of authentication (*Coates, col. 10 lines 40 - 52*).

**116.** The limitations of claim 155 are rejected in the analysis of claim 141; claim 155 is rejected on that basis.

**117.** The limitations of claim 177 are rejected in the analysis of claim 141; claim 177 is rejected on that basis.

**118.** The limitations of claim 182 are rejected in the analysis of claim 147; claim 182 is rejected on that basis.

**119.** Claims 146 and 181 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiley in view of Sethi (US 6,704,780 B1).

**120.** Regarding claim 146, Wiley shows

Wiley does not show all of: performing compression of said at least one data structure.

Sethi shows performing data structure compression (*Fig. 8, item 802 and col. 6 lines 15 - 25*).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of Wiley with the file handling teachings of Sethi in order to provide the predictable result of reduced memory use.

**121.** The limitations of claim 181 are rejected in the analysis of claim 146; claim 181 is rejected on that basis.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. MacIlwain whose telephone number is (571) 272-9686. The examiner can normally be reached on M-F 7:30AM - 5:00PM EST; off alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess, can be reached on (571) 272 - 3949. The fax phone number for the organization where this application or proceeding is assigned is 571 - 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOHN MACILWINEN/  
Examiner, Art Unit 2442

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